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Term	Documents
DSM.DWPI,TDBD,EPAB,JPAB,USPT,PGPB.	9504
DSMS.DWPI,TDBD,EPAB,JPAB,USPT,PGPB.	72
"13084".DWPI,TDBD,EPAB,JPAB,USPT,PGPB.	51
13084S	0
(DSM ADJ "13084").USPT,PGPB,JPAB,EPAB,DWPI,TDBD.	1
(DSM 13084).USPT,PGPB,JPAB,EPAB,DWPI,TDBD.	1

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L18

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<u>Set Name</u> side by side	<u>Query</u>	<u>Hit Count</u>	<u>Set Name</u> result set
<i>DB=USPT,PGPB,JPAB,EPAB,DWPI,TDBD; PLUR=YES; OP=ADJ</i>			
<u>L18</u>	dsm 13084	1	<u>L18</u>
<u>L17</u>	salivaricin b	1	<u>L17</u>
<u>L16</u>	"streptococcus salivarius" and "dsm 13084"	1	<u>L16</u>
<u>L15</u>	"streptococcus salivarius k12"	0	<u>L15</u>
<u>L14</u>	"streptococcus salivarius k 12"	0	<u>L14</u>
<u>L13</u>	streptococcus salivarius k12	0	<u>L13</u>
<u>L12</u>	streptococcus salivarius	245	<u>L12</u>
<i>DB=USPT; PLUR=YES; OP=ADJ</i>			
<u>L11</u>	15 same l9	19	<u>L11</u>
<u>L10</u>	15 and l9	83	<u>L10</u>
<u>L9</u>	oral\$7 or mouth\$	177810	<u>L9</u>
<u>L8</u>	dsm 13084	0	<u>L8</u>
<u>L7</u>	15 same l6	1	<u>L7</u>
<u>L6</u>	k12	3238	<u>L6</u>
<u>L5</u>	streptococcus salivarius	171	<u>L5</u>
<u>L4</u>	novak, j\$10/in	0	<u>L4</u>
<u>L3</u>	novak, j\$10/inv	0	<u>L3</u>
<u>L2</u>	novak,j\$5/in	0	<u>L2</u>
<u>L1</u>	novak, j./in	0	<u>L1</u>

END OF SEARCH HISTORY

(FILE 'HOME' ENTERED AT 18:36:59 ON 28 MAY 2002)

FILE 'CA, BIOSIS, MEDLINE' ENTERED AT 18:37:20 ON 28 MAY 2002

L1	7 S SALIVARICIN B
L2	5 DUP REM L1 (2 DUPLICATES REMOVED)
L3	2501 S STREPTOCOCCUS SALIVARIUS?
L4	0 S STREPTOCOCCUS SALIVARIUS K12
L5	0 S STREPTOCOCCUS SALIVARIUS K 12
L6	0 S DSM 13084

=>

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NEWS 3 Jan 29 FSTA has been reloaded and moves to weekly updates  
NEWS 4 Feb 01 DKILIT now produced by FIZ Karlsruhe and has a new update  
frequency  
NEWS 5 Feb 19 Access via Tymnet and SprintNet Eliminated Effective 3/31/02  
NEWS 6 Mar 08 Gene Names now available in BIOSIS  
NEWS 7 Mar 22 TOXLIT no longer available  
NEWS 8 Mar 22 TRCTHERMO no longer available  
NEWS 9 Mar 28 US Provisional Priorities searched with P in CA/CAPLUS  
and USPATFULL  
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NEWS 11 Apr 02 PAPERCHEM no longer available on STN. Use PAPERCHEM2  
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NEWS 17 Apr 22 BIOSIS Gene Names now available in TOXCENTER  
NEWS 18 Apr 22 Federal Research in Progress (FEDRIP) now available  
  
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CURRENT MACINTOSH VERSION IS V6.0a(ENG) AND V6.0Ja(JP),  
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FILE 'HOME' ENTERED AT 18:36:59 ON 28 MAY 2002

=> file ca, biosis, medline  
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FILE 'MEDLINE' ENTERED AT 18:37:20 ON 28 MAY 2002

=> s salivaricin b?  
TERM 'B?' EXCEEDED TRUNCATION LIMITS - SEARCH ENDED

<-----User Break----->

u

SEARCH ENDED BY USER

You have entered a truncated stem which occurs in too many terms.  
Make the stem longer and try again. For example, if your original  
term was 'degr?' to search for variations and the abbreviation for  
'degradation', you could replace it with the expression '(degrdn OR  
degrad?)'. If your search term was numeric, e.g., 'C>5', reduce the  
size of the range.

=> s salivaricin b  
L1 7 SALIVARICIN B

=> dup rem l1  
PROCESSING COMPLETED FOR L1  
L2 5 DUP REM L1 (2 DUPLICATES REMOVED)

=> d 1-5 ab,bib

L2 ANSWER 1 OF 5 CA COPYRIGHT 2002 ACS  
AB This invention provides an antibacterial protein, **salivaricin**  
**B. Salivaricin B** is bacteriocidal with respect  
to, inter alia, *S. pyogenes* and therefore has numerous therapeutic  
applications. These applications include, but are not limited to,  
forming  
part of therapeutic formulations for use in treating or preventing  
streptococcal infections of the throat.

AN 134:316074 CA

TI Lantibiotic **salivaricin B** production from  
*Streptococcus salivarius*

IN Tagg, John Robert; Dierksen, Karen Patricia; Upton, Mathew

PA University of Otago, N. Z.; Blis Technologies Limited

SO PCT Int. Appl., 30 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001027143	A1	20010419	WO 2000-NZ197	20001012
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,				

CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,  
HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,  
LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,  
SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,  
YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM  
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,  
DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,  
CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG  
EP 1169340 A1 20020109 EP 2000-970338 20001012  
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
IE, SI, LT, LV, FI, RO  
NO 2001003905 A 20011010 NO 2001-3905 20010810  
PRAI NZ 1999-500261 A 19991012  
WO 2000-NZ197 W 20001012  
RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 2 OF 5 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.  
AB Streptococcus salivarius 20P3 produces a 22-amino-acid residue  
lantibiotic, designated salivaricin A (Sala), that inhibits the growth of  
a range of streptococci, including all strains of Streptococcus pyogenes.  
Lantibiotic production is associated with the sal genetic locus  
comprising  
salA, the lantibiotic structural gene; salBCTX genes encoding peptide  
modification and export machinery proteins; and salYKR genes encoding a  
putative immunity protein and two-component sensor-regulator system.  
Insertional inactivation of salB in S. salivarius 20P3 resulted in  
abrogation of Sala peptide production, of immunity to Sala, and of salA  
transcription. Addition of exogenous Sala peptide to salB mutant cultures  
induced dose-dependent expression of salA mRNA (0.2 kb), demonstrating  
that Sala production was normally autoregulated. Inactivation of salR  
encoding the response regulator of the SalKR two-component system led to  
reduced production of, and immunity to, Sala. The sal genetic locus was  
also present in S. pyogenes SF370 (M type 1), but because of a deletion  
across the salBCT genes, the corresponding lantibiotic peptide,  
designated  
SalA1, was not produced. However, in S. pyogenes T11 (M type 4) the sal  
locus gene complement was apparently complete, and active SalA1 peptide  
was synthesized. Exogenously added SalA1 peptide from S. pyogenes T11  
induced salA1 transcription in S. pyogenes SF370 and in an isogenic S.  
pyogenes T11 salB mutant and salA transcription in S. salivarius 20P3  
salB. Thus, Sala and SalA1 are examples of streptococcal lantibiotics  
whose production is autoregulated. These peptides act as intra- and  
interspecies signaling molecules, modulating lantibiotic production and  
possibly influencing streptococcal population ecology in the oral cavity.  
AN 2001:324677 BIOSIS  
DN PREV200100324677  
TI Intra- and interspecies signaling between Streptococcus salivarius and  
Streptococcus pyogenes mediated by Sala and SalA1 lantibiotic peptides.  
AU Upton, M.; Tagg, J. R.; Wescombe, P.; Jenkinson, H. F. (1)  
CS (1) Department of Oral and Dental Science, University of Bristol Dental  
School, Lower Maudlin Street, Bristol, BS1 2LY:  
howard.jenkinson@bristol.ac.uk UK  
SO Journal of Bacteriology, (July, 2001) Vol. 183, No. 13, pp. 3931-3938.  
print.  
ISSN: 0021-9193.  
DT Article  
LA English  
SL English

L2 ANSWER 3 OF 5 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.  
AB Lactic acid bacteria (LAB) produce many different antimicrobial proteins, some of which have potential in food preservation. The molecular analysis of bacteriocins has gained much attention and has advanced rapidly in recent years, and it became routine to analyze the way in which bacteriocins are expressed and translocated. Since they are associated with foods of plant and animal origins, the shared interest is that they can be utilized as a vector to deliver the active constituents at the target in the gastrointestinal tract after digestion and be used in therapy. In this respect, the molecular pattern of the expression and translocation of **salivaricin B** (SalB), a bacteriocin, from *Lactobacillus salivarius* M7 was studied at the molecular level. The gene encoding SalB and the flanking sequences were obtained and sequenced.

The gene encoding SalB comprised an open reading frame (ORF) of 171 bp having a 57 bp long leader sequence and a 114 bp long structural part. Ribosomal binding site (GAGG, RBS) is located at a canonical distance of 8 bp upstream from the start site.

AN 2002:10153 BIOSIS

DN PREV200200010153

TI Molecular characterization of the gene encoding for the **salivaricin B** activity and its flanking sequences.

AU Cataloluk, Osman (1)

CS (1) Tip Fakultesi, Tibbi Biyoloji Anabilim Dalı, Gaziantep Universitesi, 27310, Gaziantep Turkey

SO Turkish Journal of Biology, (2001) Vol. 25, No. 4, pp. 379-386. print. ISSN: 1300-0152.

DT Article

LA English

L2 ANSWER 4 OF 5 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.

AN 2001:104698 BIOSIS

DN PREV200100104698

TI The sequence information of the gene coding for **salivaricin B** activity.

AU Cataloluk, Osman (1)

CS (1) Typ Fakultesi, Tybbi Biyoloji AD, Gaziantep Universitesi, 27310, Gaziantep Turkey

SO Biochemical Society Transactions, (October, 2000) Vol. 28, No. 5, pp. A246. print.

Meeting Info.: 18th International Congress of Biochemistry and Molecular Biology Birmingham, UK July 16-20, 2000

ISSN: 0300-5127.

DT Conference

LA English

SL English

L2 ANSWER 5 OF 5 CA COPYRIGHT 2002 ACS

DUPLICATE 1

AB Approx. 1000 *Lactobacillus* strains were isolated and screened for the prodn. of antimicrobial activity, using a target panel of spoilage organisms and pathogens. Only 8 pos. strains were found; 2 of these were studied in more detail. *L. salivarius* M7 produces the new broad spectrum bacteriocin **salivaricin B**, which inhibits the growth of *Listeria monocytogenes*, *Bacillus cereus*, *Brochothrix thermosphacta*, *Enterococcus faecalis*, and many *Lactobacilli*. A new atypical bacteriocin produced by *L. acidophilus* M46, acidocin B, combines the inhibition of *Clostridium sporogenes* with a very narrow activity spectrum within the genus *Lactobacillus* and was selected for further characterization. Acidocin B is sensitive to trypsin, heat-stable (80.degree. for 20 min), and can be extd. from the culture supernatant fluid with BuOH. Native

acidocin B occurs as a large mol. wt. complex (100 kDa), while with SDS-PAGE the partly purified activity migrates as a peptide of 2.4 kDa. Optimization of the cultivation conditions resulted in an 8-fold increase of the amt. of acidocin B produced during growth. Growth is not

necessary

for acidocin B prodn.; washed producer cells can synthesize the bacteriocin in a chem. defined prodn. medium. The application potential of acidocin B is discussed.

AN 122:76127 CA

TI Antimicrobial activity of lactobacilli: preliminary characterization and optimization of production of acidocin B, a novel bacteriocin produced by *Lactobacillus acidophilus* M46

AU ten Brink, B.; Minekus, M.; van der Vossen, J.M.B.M.; Leer, R.J.; Huis in't Veld, J.H.J.

CS Department of Microbiology, TNO Nutrition and Food Research, Zeist, Neth.

SO J. Appl. Bacteriol. (1994), 77(2), 140-8

CODEN: JABAA4; ISSN: 0021-8847

DT Journal

LA English

=> s streptococcus salivarius?

L3 2501 STREPTOCOCCUS SALIVARIUS?

=> s streptococcus salivarius k12

L4 0 STREPTOCOCCUS SALIVARIUS K12

=> s streptococcus salivarius k 12

L5 0 STREPTOCOCCUS SALIVARIUS K 12

=> s dsm 13084

L6 0 DSM 13084

=> d his

(FILE 'HOME' ENTERED AT 18:36:59 ON 28 MAY 2002)

FILE 'CA, BIOSIS, MEDLINE' ENTERED AT 18:37:20 ON 28 MAY 2002

L1 7 S SALIVARICIN B

L2 5 DUP REM L1 (2 DUPLICATES REMOVED)

L3 2501 S STREPTOCOCCUS SALIVARIUS?

L4 0 S STREPTOCOCCUS SALIVARIUS K12

L5 0 S STREPTOCOCCUS SALIVARIUS K 12

L6 0 S DSM 13084



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L11: Entry 8 of 19

File: USPT

Nov 21, 1995

DOCUMENT-IDENTIFIER: US 5468479 A

TITLE: Compositions containing lactic acid bacterium Streptococcus salivariusAbstract Paragraph Left (1):

Disclosed are compositions such as foods and pharmaceuticals, and methods of their production, comprising at least one lactic acid bacterium capable of assisting in intestinal regulation and preventing dental caries. The bacterium is an isolated living Streptococcus salivarius strain identified as FERM BP-3885 and is further capable of producing dextranase while persisting in the oral cavity.

Brief Summary Paragraph Right (3):

The bacterial flora indigenous to the oral cavity vary continuously and consist of a variety of bacterial species. Among the bacteria indigenous to the oral cavity, the following species are classified as lactic acid bacteria by Bergey's Manual of Systematic Bacteriology: Vol. 2 (Williams & Wilkins, eds. 1986): Streptococcus salivarius, Streptococcus sangius, Streptococcus mitior, Streptococcus milleri, Streptococcus mutans, Streptococcus rattus, Streptococcus cricetus, Streptococcus sobrinus, Streptococcus ferus, Streptococcus oralis, and Streptococcus mills.

Detailed Description Paragraph Right (2):

Of the various above-noted bacterial species listed as lactic acid bacteria in Bergy's Manual, only Streptococcus salivarius is non-pathogenic and indigenous to the human oral cavity. This species also varies from strain to strain in its capacity to produce insoluble glucan (dextran). The dextranase activity of ten strains of Streptococcus salivarius obtained from the principal strain preservation institution of Japan was determined by inoculating samples of each strain onto a MITIS-SALIVARIUS AGAR (Difco) to which 1% Chapman Solution was added. The shape of the bacterial colony was determined 30 hours and 48 hours after inoculation. The same ten strains were then inoculated onto Todd Hewitt Broth (Difco) to which 0.2% Blue Dextran was added. The relative extent of dextranase activity was determined on the basis of the size of the transparent halo formed around the bacterial colony 48 hours after inoculation. The relative size of the halo was assigned a score ranging from none(-) to very large(+++). The results, shown in FIG. 2, again indicate that strain M-33 and strain G8326 produced the highest amount of dextranase activity and produced crater-shaped colonies after 48 hours. Strain M-33 of Streptococcus salivarius was seen to possess potent dextranase activity on par with the recombinant-produced Streptococcus sanguis (pMNK-4). In view of the high level of dextranase activity possessed by Streptococcus salivarius, that strain was further tested for use as the lactic acid bacteria component of the compositions according to the invention for degradation of dental plaque.

## CLAIMS:

1. An ingestible composition comprising a biologically pure live Streptococcus salivarius M-33 deposited as accession number FERM BP-3885 which persists in the oral cavity and which produces dextranase.

**WEST**

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L11: Entry 12 of 19

File: USPT

Dec 1, 1987

DOCUMENT-IDENTIFIER: US 4710379 A

TITLE: Intestinal microflora-improving agent

## CLAIMS:

2. A method for selectively stimulating the growth of intestinal lactic acid bacteria, which comprises orally administering an effective amount of bacterial cells, or an extract thereof, of a microorganism having the identifying characteristics of at least one strain selected from the group consisting of Streptococcus faecium FERM BP-296, Streptococcus faecalis FERM BP-297, Streptococcus avium FERM BP-298, Streptococcus salivarius FERM BP-299, Streptococcus durans FERM BP-300, Streptococcus mitis FERM BP-301, Streptococcus equinus FERM BP-302, and mutants thereof, to a person recognized as being deficient in intestinal lactic acid bacteria.